

Sample ICD Cover/Approval Page

Document Number _____

Date (day-month-year) _____

INTERFACE CONTROL DOCUMENT

*(Name) Segment to (Name) Segment
of _____ Project*

or

*(CI Title and Number) to (CI Title and Number)
of _____ Project*

Approval/Concurrence

	Organization	Signature	Date
AF/PO	_____	_____	_____
Principle Contractor	_____	_____	_____
Participating Contractor(s)	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

INTERFACE CONTROL DOCUMENT (ICD) SAMPLE TEMPLATE

1. Scope

1.1 Item Description

Include in this paragraph an identification and brief description of the interfacing system segments, CI's, and/or equipments.

1.2 Contractors

The principal contractor who has prime responsibility For the interface and each participating contractor shall be names as shown below:

- Principal - (enter name of principal contractor)
- Participant - (enter name of participating contractor)

2. Applicable Documents

This paragraph shall list those documents (specifications, standards, drawings, bulletins, manuals, etc.) that are specified in the IFS. With the exception of interface documents (IFS/ICD's) these documents shall be identified as the current authorized document which established the requirement. Interface documents (IFS/ICD's) shall be listed by their basic identification number and title only. The introductory statement for this paragraph and the general grouping of documents shall be in accordance with MIL-STD-490.

3. Interface Requirements

The interface between system segments or configuration items shall be identified and defined in this paragraph. This definition shall contain sufficient detail so that the associate contractors will be able to agree on one interpretation of the interface and hence be able to proceed with assurance that the produced hardware and/or computer software will mate and/or function in accordance with prescribed requirements. The defined interfaces shall include, but not be limited to, the following types: Physical, Functional, Environmental and Safety.

An outline is presented below for each type of interface identified above. If a certain paragraph is not applicable, the paragraph heading shall be followed by the words "Not Applicable".

3.1 Physical

Physical interface is the common boundary between two or more hardware items that connect, fit, or have a mechanical interrelationship and has design effects on one or more system, segment, or CI. This paragraph shall define all physical and mechanical interfaces and detail specific interface requirements including but not limited to applied loads, center of gravity locations, weight and balance, material specifications, dissimilar metals, and dimensions and tolerances. Applicable Interface Control Drawings (ICD's) shall be referenced where appropriate.

3.2 Functional

Functional interface is a juncture of two or more functions that interact, or of a function which has a design effect on another contractor's system segment, or CI. These functions are derived from system requirements and represent finite and discrete actions to be accomplished by equipment, personnel, facilities, or a combination of the three. Functional Interfaces shall be defined and their specific requirements detailed within this paragraph. This shall include, but not be limited to, the following technical areas: Electronic, Electrical, Hydraulic, Pneumatic, Optical, Crew Provisions and Display/Control, and Weapon Control. Applicable ICD's shall be referenced where appropriate. Three potential paragraph subdivisions and related minimum informational requirements are shown below. Other identified functional interface technical areas shall be defined in a similar manner.

3.2.1 Electronic. Electronic interfaces and their specific interface requirements shall be defined in this paragraph. This shall include, but not be limited to, the following details: Voltages AC and DC, Frequencies, Current, Shielding requirements, Signal characteristics, Signal circuit impedance, and Related tolerances.

3.2.2 Electrical. The electrical interfaces and their specific interface requirements shall be defined in this paragraph. This shall include, but not be limited to, the following power considerations: Type (AC or DC, nominal frequency, nominal voltage, number of phases), Quality (steady state and transient voltage, wave form and frequency characteristics), and Quantity.

3.2.3 Hydraulic and Pneumatic. Hydraulic and/or pneumatic interfaces and their specific interface requirements shall be defined in this paragraph. This shall include, but not be limited to, the following considerations: Type of power, Power transmission Interface, Pressure required, Flow rate, temperature, Ground operations interface, and Percentage of fluctuation permissible of fluid as related to flow, pressure, and temperature.

3.2.X Other (as needed). Identify any other interfaces that may be required by the given project.

3.3 Environmental

Environmental interfaces apply to system equipment interfaces having a direct design or performance effect on the system segment or CI controlled by another associate contractor. Environments at each interface shall be defined and specific requirements detailed. This definition shall address, but shall not be limited to, such factors as vibration envelopes, shock levels, pulse shapes, acceleration, aerodynamic, temperature, heating Modes, acoustical noise, air conditioning requirements, and containment control requirements. Applicable ICD's shall be referenced where appropriate.

3.4 Safety

This paragraph shall define those requirements which are basic to the design of either or all associate contractor segments or CI's with respect to equipment characteristics, methods of operation and environmental influences and which will prevent personnel injury and equipment degradation without degrading equipment operational capabilities. These requirements shall include, but not be limited to, such things as: Restricting the use of dangerous materials, Explosion proofing, Control of ground and captive flight radiation

or electromagnetic energy, Grounding provisions, gas detection and warning, and Decontamination requirements. Applicable ICD's shall be referenced where appropriate.

4. Quality Assurance Provisions

This paragraph shall identify and define the inspection and test requirements necessary to verify the designed hardware and/or computer software compliance with the specified interface requirements of Section 3.

5. Notes

The contents of this paragraph are not contractually binding. Background information, administrative notes, definitions, etc., may be included in this paragraph.

Note: Interface Specifications shall be jointly developed and coordinated by all contractors and Government agencies affected by the interface and shall be submitted to the Government for approval.